

In re Appln. NO 09/429,331

Page 150, line 22, after "...GTCAG" insert

--(SEQ ID NO:5)--;

line 25, after "...GTCAG" insert

--(SEQ ID NO:6)--;

line 28, after "...GTCAG" insert

--(SEQ ID NO:7)--;

line 31, after "...GTCAG" insert

--(SEQ ID NO:8)--;

line 33, after "...TCGAG" insert

--(SEQ ID NO:9)--.

Page 162, line 33, after "...CAGT-3'" insert

--(SEQ ID NO:14)--;

line 36, after "...TAGA-3'" insert

--(SEQ ID NO:15)--.

Page 173, line 26, after "...SLLSR" insert

--(SEQ ID NO:187)--.

Page 183, line 6, after "SRLXXLL" insert

--(SEQ ID NO:2)--.

Page 225, line 4, after "...KQAV" insert

--(SEQ ID NO:10)--;

line 5, after "...GVSR" insert

--(SEQ ID NO:11)--;

line 6, after "...MLSR" insert

--(SEQ ID NO:12)--;

line 7, after "...YASR" insert

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--(SEQ ID NO:13)--.

Page 238, line 2, after "...GHSR" insert

--(SEQ ID NO:59)--;

line 3, after "...WRSR" insert

--(SEQ ID NO:60)--;

line 4, after "...KDSR" insert

--(SEQ ID NO:61)--.

Attached are copies of pages 239, 244-251, 266-268, 270, and 272 in which sequence identifiers are marked in red. Entry of these revisions is respectfully requested.

Please enter the enclosed "Sequence Listing", pages 1-79.

#### REMARKS

1. Applicants hereby submit the following:

[XX] a paper copy of a "Sequence Listing", complying with §1.821(c), to be incorporated into the specification as directed above;

[ ] an amendment to the paper copy of the "Sequence Listing" submitted on , the amendment being in the form of substitute sheets;

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[XX] the Sequence Listing in computer readable form, complying with §1.821(e) and §1.824, including, if an amendment to the paper copy is submitted, all previously submitted data with the amendment incorporated therein;

[ ] pursuant to §1.821(e), reference is made to the computer readable form filed on , in USSN , which presents the identical Sequence information, the use of which is now requested, in lieu of submitting a new computer readable form; and/or

[ ] a substitute computer readable form to replace one found to be damaged or unreadable.

[XX] 2. The description has been amended to comply with §1.821(d).

3. The undersigned attorney or agent hereby states as follows:

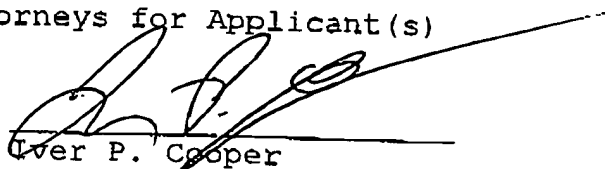
(a) this submission is not believed to include new matter [§1.821(g)];

- (b) the contents of the paper copy (as amended, if applicable) and the computer readable form of the Sequence Listing, are believed to be the same [§1.821(f) and §1.825(b)];
- (c) if the paper copy has been amended, the amendment is believed to be supported by the specification and is not believed to include new matter [§1.825(a)]; and
- (d) if the computer readable form submitted herewith is a substitute for a form found upon receipt by the PTO to be damaged or unreadable, that the substitute data is believed to be identical to that originally filed [§1.825(d)].

Respectfully submitted,

BROWDY AND NEIMARK  
Attorneys for Applicant(s)

By:

  
Over P. Cooper

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Table 3: Phage/Peptide Classification

		Seq ID	# and isolation method
		Seq ID	# and isolation method
<u>Class 1</u>			
5	S S N H Q S S R L I E L L S R	63	#4 ER + estradiol
	S R L K E L L L L P T D L S R	63	#15 ER + estradiol
	S S K L Y C L L D E S Y C S R	64	#35 ER + estradiol
	H G P L T L N L L R S S G G	65	#41 ER + estradiol
	S R L E Y W L K W E P G P S R	66	#12 ER + estradiol

Class 2

10	S S C K W Y E K C S G L W S R	67	#7 ER
	S S E Y C F Y W D S A H C S R	68	#33 ER + estradiol
	S S W V L L R D L P W G S R	69	#31 ER
	S S W V R L S D F P W G V S R	70	#24 ER + estradiol

Class 3

	S S L T S R D F G S W Y A S R	71	#5 ER + estradiol
--	-------------------------------	----	-------------------

Class 4

15	S R T W E S P L G T W E W S R	72	#13 ER
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Class 5

	S A A C A T I S H Y L M G G	73	#48 ER
--	-----------------------------	----	--------

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Table 7: New Era Peptide Sequences Immobilized on Plastic		SERM	
Peptide name	Peptide Sequence	Isolated in the presence of receptor form	present when peptide was identified
1PT	SRNLCFWDDDEYCSR 74	$\alpha$	Tamoxifen & ICI 182,780
2PT	SWDMHQFFWEGVSR 75	$\alpha$	Tamoxifen
3PT	SRWHGTLFWQDEQSR 76	$\alpha$	Tamoxifen
4PT	SSCKWYEKCSGLWSR 77	$\alpha$	Tamoxifen & ICI 182,780
5PT	SSRMGHVWYDWTFSR 78	$\alpha$	Tamoxifen
6PT	SSRLLGDFGGSVVS 79	$\alpha$	Tamoxifen
7PT	SSKYVFGFQVAGGSR 80	$\alpha$	Tamoxifen
8PT	SSWAGIKFGKPPHSR 81	$\alpha$	Tamoxifen
9PT	SSWSYSGKPTFLSSR 82	$\alpha$	Tamoxifen
10PT	SRDTGDMWGRGGR 83	$\alpha$	Tamoxifen
11PT	SSGRYDPFVLNAASR 84	$\alpha$	Tamoxifen
12PT	SSSPWWSFNLDMMSR 85	$\alpha$	Tamoxifen
13PT	SSWPLYLPKREEWASR 86	$\alpha$	Tamoxifen
14PT	SSGWIEQKLRGFSR 87	$\alpha$	Tamoxifen
15PT	SSSATSIVQYQISR 88	$\alpha$	Tamoxifen
16PT	SSYLTLGKSMMAISR 89	$\alpha$	Tamoxifen
17PT	SSWHSRWDALGFSR 90	$\alpha$	Tamoxifen
18PT	SSGYWGGWDYGACSR 91	$\alpha$	Tamoxifen
19PT	SRDNCGAGLWAGCSR 92	$\alpha$	Tamoxifen
1PI	SSSTPGWIEWDWAASR 93	$\alpha$	Tamoxifen
2PI	SSYWDGSRWRKTCVCSR 94	$\alpha$	ICI 182,780
3PI	SSRTAEDYCFEADDYWC 95	$\alpha$	ICI 182,780
4PI	SSRALALFPVGMESR 96	$\alpha$	ICI 182,780
5PI	SSDCESLTSYPHLKALCSR 97	$\alpha$	ICI 182,780
6PI	SSTATALRDRLAYSR 98	$\alpha$	ICI 182,780
7PI	SSGKTREHYREGISR 99	$\alpha$	ICI 182,780

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Table 8: New ER $\alpha$ -ERE Peptide Sequence Information

peptide name	Peptide Sequence (kDa)	Isolated in the presence of receptor form	SERM present when peptide was identified
5			
E1-1	HSNNHSPWLFRLGG 100	$\alpha$	Estradiol
E1-3	HSHPHSHLLYLKMG 101	$\alpha$	Estradiol
E1-4	HSHPLPPLLSRLTGG 102	$\alpha$	Estradiol
E1-7	SRLTCLLQSNQWDSEQCSR 103	$\alpha$	Estradiol
I4-10	SSLTSRDFGWSYASR 104	$\alpha$	ICI
T3-1	SRTLQLDWGTLYSR 105	$\alpha$	Tamoxifen
T1-10	SRLPPSVFSMCGSEVCLSR 106	$\alpha$	Tamoxifen
T2-10	SRFEIWKPEPGCVSSLENWE 107	$\alpha$	Tamoxifen
	PGKRVCSR	$\alpha$	Raloxifen
	SRVFGVSGGEVVLINGSSR 108	$\alpha$	Raloxifen
	SRLCFGDWCMLGGVDVLSR 109	$\alpha$	Buffer
	SSLNMVVDTPWCGKWVCSR 110	$\alpha$	Buffer
15			
T3-11	SSRPDAAFFGAKLSR 111	$\alpha$	Buffer
1R	SSRPSPSPFWKQLSR 112	$\alpha$	Buffer
2R	SSRPSPSPFWKQLSR 113	$\alpha$	Buffer
3B	SSRPTAENFRENLSR 114	$\alpha$	Buffer
4B	SSRPTAENFRENLSR 115	$\alpha$	Buffer
5B	SRWDTSWWLEELSR 116	$\alpha$	Buffer
6B	SSRIADLFWRLPSR 117	$\alpha$	Buffer
1B	SSRYHCEGWVWTLR 118	$\alpha$	Buffer
7B	SSDWCFGWGGWCASEAVSR 119	$\alpha$	Estradiol
10B	SRNWDWAALELLPYPHPSR 120	$\alpha$	Estradiol
9B	SSLTSRDFGWSYASR 121	$\alpha$	Estradiol
1E	SRSPILTHLLSLGSR 122	$\alpha$	Estradiol
2E	SRSTGILWKLTLTASR 123	$\alpha$	Estradiol
3E	SSHGILWRLLSEGR 124	$\alpha$	Estradiol
9E	SRSDSILLWRMLSESR 125	$\alpha$	Estradiol
11E	SRLVALLKSPWVSRSR 126	$\alpha$	Estradiol
4E	SRLEELLMLDFWRSR 127	$\alpha$	Estradiol
5E	SSKLWQLLSSPIDSR 128	$\alpha$	Estradiol
6E	SSKLYCLLDESICSR 129	$\alpha$	Estradiol
30			
14E			

Estradiol  
Estradiol  
Estradiol  
Estradiol  
Estradiol  
Estradiol  
Estradiol  
Estradiol

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α  
α  
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α  
α

SRSLMDMLMSDDYVTVSR 128  
SSRLACELMYEDADVCSR 129  
HSHSPILLMALLAPPG 130  
SRLEYVLRLLGTYESR 131  
SSCLREILLYGACSR 132  
SSRTAEDYCFEADDYWCSSR 133  
SSRLRCYLSSSKVDQWACSR 134  
SSYKPHSLLEWHLLGGTSR 135

7E  
8E  
15E  
10E  
13E  
16E  
17E  
18E



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Table 9: New ER $\beta$ -ERE Peptide Sequence		Peptide Sequence		Seq ID No:		Information		SERM	
Peptide name		Peptide Sequence		Seq ID No:		in the presence of receptor form	Isolated	present when peptide was identified	
1B- $\beta$		SRLHCLLDSSYCSSR	136			$\beta$		Buffer	
2B- $\beta$		SRLHCLLDSSYCSSR	137			$\beta$		Buffer	
3B- $\beta$		SSWPNPTTWERQLSR	138			$\beta$		Buffer	
4B- $\beta$		SYSKEWFEERLNSR	139			$\beta$		Buffer	
5B- $\beta$		SSMMREFFERELSR	140			$\beta$		Buffer	
6B- $\beta$		SSGLPPNFERMLKSR	141			$\beta$		Buffer	
7B- $\beta$		SSGPWLMHYLGGGSR	142			$\beta$		Buffer	
8B- $\beta$		SSTSWLHHYLMGTSR	143			$\beta$		Buffer	
9B- $\beta$		SRGGGECLGPWCLSR	144			$\beta$		Buffer	
12B- $\beta$		SSEACVGRWMLCEQLGVS	145			$\beta$		Buffer	
14B- $\beta$		SSQVWPQWRLVESR	146			$\beta$		Buffer	
16B- $\beta$		SSSLGPWRLSELSR	147			$\beta$		Buffer	
17B- $\beta$		SSSGPWRWGLSIESR	148			$\beta$		Buffer	
18B- $\beta$		SRECVGGWCLAEISR	149			$\beta$		Buffer	
19B- $\beta$		SSIPPRSWWLSQLSR	150			$\beta$		Buffer	
20B- $\beta$		SSWPGAEWFKEQLSR	151			$\beta$		Buffer	
21B- $\beta$		SSKLYCLLDSEYCSR	152			$\beta$		Buffer	
23B- $\beta$		HSYSSHP'LLLSYLWGG	153			$\beta$		Buffer	
24B- $\beta$		HSWLGPPWRLSSIDLGG	154			$\beta$		Buffer	

5

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25B-β	HSTDMGWLRPWRLGG	155	β	Buffer
1T-β	SSVFTIMDGKVALSR	156	β	Tamoxifen
2T-β	SRPYCLGDVWCLDSR	157	β	Tamoxifen
4T-β	SREWEDGFGGRWLSR	158	β	Tamoxifen
5T-β	SSWNSREFFLSQLSR	159	β	Tamoxifen
6T-β	SSITMFEDFFYERLSR	160	β	Tamoxifen
7T-β	SSARPPWWLQFEGSSR	161	β	Tamoxifen
8T-β	SSQEEWLLPWRLASR	162	β	Tamoxifen
9T-β	SRLPPSVFSMCGSEVCLSR	163	β	Tamoxifen
10T-β	SSGPFYVGGMLWPADCLSR	164	β	Tamoxifen
12T-β	SREGWMPWRLADSR	165	β	Tamoxifen
13T-β	SRNECIGPWCLTISR	166	β	Tamoxifen
14T-β	SSPGSREWFKDMLSR	167	β	Tamoxifen
15T-β	SSVASREWWVRELSR	168	β	Tamoxifen
16T-β	SRMFQVCGDEVCLSR	169	β	Tamoxifen
17T-β	SSDLHRDCLGVWCLSR	170	β	Tamoxifen
18T-β	SRLNGVFCHIDSSDLWVCSR	171	β	Tamoxifen
20T-β	SRPGCLRGVWCLADTPPSR	172	β	Tamoxifen
21T-β	SSRLVPHISFWLDGLMHGSR	173	β	Tamoxifen
22T-β	SSISTYIMGEWFYAMLSSR	174	β	Tamoxifen
23T-β	SSDLYSQMREFFQINLSR	175	β	Tamoxifen
1E-β	SSRGLLWDLLTKDSR	176	β	Estradiol

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SRHGILWDLQGDSR	177	Estradiol
SRHDLRLRDESPR	178	Estradiol
SRDWRSGFLYELLR	179	Estradiol
SSDTRSRLYELLSSSYTSR	180	Estradiol
SRLEELLRVGVLTSR	181	Estradiol
SRLEDLLRGDSKPQSR	182	Estradiol
SSPTGHRLLLESULLNSNSR	183	Estradiol
SSILERLLGGGSAETV	184	Estradiol
SRSPILWHLLQDGSR	185	Estradiol
SSRTPILFSLLETSR	186	Estradiol
SSIKDFPNLISLLSR	187	Estradiol
SSGSSAGRMLMLLQDGVSR	188	Estradiol
SREGLLMRLIGDSR	189	Estradiol
SSHCHTRLCSLTTSR	190	Estradiol
SSRLLCLLDAGQCSR	191	Estradiol
SRNELCLLDQEACSR	192	Estradiol
SSLKCLLNSNFCSR	193	Estradiol
SSLKCLLQSSPQKPFCSR	194	Estradiol
SSRTTLEHYVLGGSR	195	Estradiol
SSAGLLEDMLKRSR	196	Estradiol
SSRCSSLLCEMLIQTKESR	197	Estradiol
SSGSSRLLEMLIQTKESR	198	Estradiol

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24E-β	SRPEGSSWLLHYLSR 199	β	Estradiol
25E-β	SSRTLLEHYLLGGSR 200	β	Estradiol
26E-β	SRWWLDDHELLLYSSR 201	β	Estradiol
27E-β	SSRTLYCHLTSSNPEWCSR 202	β	Estradiol
28E-β	SSTRLMCWLGSADTSHCSR 203	β	Estradiol
29E-β	SSYDWQCPSWYCPAPSSR 204	β	Estradiol
30E-β	SSTTVRCPEWYCGSR 205	β	Estradiol
31E-β	SSWDFRVPWWYNNR 206	β	Estradiol
32E-β	SSQWQAPWWYIDASR 207	β	Estradiol
33E-β	SSRPSFTIPWWFDDPSRSR 208	β	Estradiol
34E-β	SSYEIPKWALQWLSR 209	β	Estradiol
35E-β	SSLDLSQFPMTASFLRESR 210	β	Estradiol

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Table 10: Panel Peptides for Example 2

$\alpha/\beta$ I, SSNHQSSRLIELLSR (AB1) [17 $\beta$ -estradiol] (see 10 no: 211)
$\alpha/\beta$ II, SAPRATISHYLMGG (AB2) [no modulator] (see 10 no: 212)
$\alpha/\beta$ III, SSWDMHQFFWEGVSR (AB3) [4-OH tamoxifen] (see 10 no: 213)
$\alpha/\beta$ IV, SRLPPSVFSMCGSEVCLSR (AB4) [same] (see 10 no: 214)
$\alpha/\beta$ V, SSPGSRKFWFKDMLSR (AB5) [same] (see 10 no: 215)
$\alpha$ I, SSEYCFYWDSAHCSR (A1) [17 $\beta$ -estradiol] (see 10 no: 216)
$\alpha$ II, SSLTSRDFGSWYASR (A2) [17 $\beta$ -estradiol] (see 10 no: 217)
$\alpha$ III, SRTWESPLGTWEVSR (A3) [no modulator] (see 10 no: 218)
$\beta$ I, SREWEDGFGGRWLSR (B1) [4-OH tamoxifen] (see 10 no: 219)
$\beta$ II, SSLDLSQFPMTASFLRESR (B2) [17 $\beta$ -estradiol] (see 10 no: 220)
$\beta$ III, SSEACVGRWMLCEQLGVS. (B3) [no modulator] (see 10 no: 221)

10

Alternative name parenthesized. Modulator used to isolate peptide in brackets.

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Seq ID NO:

Table 100

A

S R A G L L S D L L E G K S R 222  
 S S R S L L R D L L M V D S R 223  
 S S N K L L Y N L L K M E S R 224  
 S S K S L L N L L S T P S R 225  
 H S F P R E S L L V R L L Q G G 226  
 S R L E M L L R S E T D F S R 227  
 S R L E E L L K W G S V T S R 228  
 S R L E Q L L K E E F S Y S R 229  
 S R L E Q L L R S E P D F S R 230  
 S R L E D L L R A P F T T S R 231  
 S R L E S L L R F G Q L D S R 232  
 S S R L L S L L V G D F N S R 233  
 S R L E E L L L G T N R D S R 234  
 S R L E E L L L M D F W R S R 235  
 S R L K E L L L P T D L S R 236  
 S R L E C L L E G R L N C S R 237  
 S S K L Y C L L D E S Y C S R 238  
 S R L S C L L M G F E D C S R 239  
 S S K L I R L L T S D E E L S R 240  
 S S R L M E L L Q E G Q G W S R 241  
 S S N H Q S S R L I E L L S R 242  
 S S R L W Q L L A S T D T S R 243  
 S S K L W Q L L S S P I D S R 244  
 S R L V A L L K S P W S V S R 245  
 S S N S M L W K L L A A P S R 246  
 S S K T L W R L L E G E S R 247  
 S R A G P V L W G L L S E S R 248  
 S R S P I L T H L L S L G S R 249  
 S S T G I L W K L L T A E S R 250  
 S S H G I L W R L L S E G S R 251

B

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SRC1a

K L V Q L L T T T A E 252  
 I L H R L L Q E G S P 253  
 L L R Y L L D K D E K 254  
 L L Q Q L L T E 255

CBP

Q L S E L L R G G S G 256  
 Q L V L L L H A H K C 257

40

RIP140

Y L E G L L M H Q A A 258  
 L L A S L L Q S E S S 259  
 H L K T L L K K S K V 260  
 Q L A L L L S S E A H 261  
 L L L H L L K S Q T I 262  
 L L Q L L L G H K N E 263  
 V L Q L L L G N P K G 264  
 L L S R L L R Q N Q D 265  
 V L K Q L L L S E N C 266

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SRC1a = human steroid receptor coactivator 1a,  
 CBP = mouse CAMP-responsive element (CREB)-binding  
 50 protien,  
 RIP 140 = human RIP140

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Table 101

Class ISER ID NO:

ER4 SSNHQSRLIELLSR 267  
 D2 GSEPKSRLLELLSAPVTDV 280  
 D30 HPTHSSRLWELLMEATPTM 281  
 D11 VESGSSRLMQLLMANDLLT 282

Class II

D47 HVYQHPLLLSLLSSEHESG 268  
 C33 HVEMHPLLMGLLMESQWGA 269  
 D14 QEAHGPLLWNLLSRSDTDW 270

Class III

F6 GHEPLTLERLLMDDKQAV 271  
 D22 LPYEGSLLLKLLRAPVEEV 272  
 D48 SGWENSILYSLLSDRVSLD 273  
 D43 AHGESSLLAWLLSGEYSSA 274  
 D17 GVFCDSILCOLLAHDNARL 275  
 D41 HHNGHSILYGLLAGSDAPS 276  
 D26 LGERASLLDMLLRQENPAW 277  
 D40 SGWNESTLYRLLQADAFDV 278  
 D15 PSGGSSVLEYLLTHDTSIL 279  
 F4 PVGEPGLLWRLLSAPVERE 284

Misc.

D10 WEEHSQMLLHLLDTGEAVW6 283

ERβsp.

#293 SSIKDFPNLISLLSR 187

25 GRIP-1

NR1 DSKGQTKLLQLLTTKSDQM 16  
 NR2 LKEKHKILHQLLQDSSSPV 17  
 NR3 KKKENALLRYLLDKDDTKD 18

SRC-1

NR1 YSQTSHKLVKLLTTTAEQQ 19  
 NR2 LTARHKILHRLLOEGSPSD 20  
 NR3 ESKDHQLLRYLLDKDEKDL 21

30

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Table 202A: Giα1 GDP/GTPγS-Independent Phage (I-Peptides)			
ID	Sequence/Motif Aligned	Seq. Lig	Library
99	SRAHLLTWSEFLDSHTK	22 BUF	E
103	SSGELITWYEFLGDLNP	23 BUF	E
107	SRGELTTWYEFLSHGRP	24 BUF	K
361	DELTWWEFISD	25 GTP	CWL
388,391	VTWYDFLMEDTK	26 GTP	R
45	GLMTWREFLQE	27 BUF	Y
397,401,412	NLMTWYEYLADGERL	28 GTP	PHD12
15r2,301,394	ADRLWTWQEFLY	29 BUF	N
380,381,140	KTYSLYEFLEL	30 GTP	H
16	SSQLLTLHEFLNS	31 BUF	
360	SSRGEYWWEFLGYSR	32	
101	SSADGIFWWEYAREAGE	33 BUF	
375,123,125,247	LGRGTTDMPWAWWS	34 GTP	
331,334	NYTERPWVWYH	35 GDP	
37	SSLYSMEPWKWYT	36 BUF	
387	KWWESDWFVNFG	37 GTP	
386	EEGMDWFMRVVE	38 GTP	



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Table 202B: Giα1 GTP-Specific Phage  
(T-Peptides)

		SEQ ID NO:		
	SVLSSSEMCFGWACY	39	GTP	M
	SEMCFGWACY	40	GDP	<u>PARO</u>
	FNEVCLGWQCY	41	GTP	K
5	SSNARPCQGWHCYLPSQSR	42		
	WDGGVWMGPAS	43	GTP	K
	MGDSVLPYGGVWLGP	44	GTP	Y
	SRYGGVWLGPENSR	45		
	SSWDGGVWVGQYGSR	46		
10	SSNLDGCFSTSGGVWVGCSR	47		
	LGYDINGVWIG	48	GTP	N
	ICDIIPWEESCSR	49	GTP	P
	ACGPAICPWDFMPQL	50	GTP	<u>PARO</u>
	370, 377, 378			
	244			
	366, G12			
	G33, G34			
	353			
	408			
	G22, G25			
	G11, G26-29			
	G9, G10			
	382			
	384			
	413			

- 15 Note: clone 244, which was identified in a screen for peptide which bound GDP:G-α, is suspected to having increased the affinity of the G-α for GTP through a conformational change.

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Table 202C: G1α1 GDP-Specific Phage  
(D-Peptides)

		<del>SSD ID#</del>		
	G4	SRGPQLTWQEFLTGAASSR	51	
	314	NVVTWWEFLGP	52	GDP
5	73	SREFVTWKEFLGS	53	BUF K
	343	SQLTWREFLFG	54	GDP R
	217	SSHLMTWHEFISD	55	GDP H
	93	SRDGFETWAEFLGASGS	56	BUF
	62	SRLTWSEYLSEIDP	57	BUF CWL
10	193	SRTVTWVDFLKET	58	GDP D
	324	MSWYEFMTTEESM	245	GDP CWI
	400	AKHDLWSWYEFLLQPI	246	GTP V
	281	SRLSWWEFLGASDCGTC	287	GDP X14C<W>
	359, 161	DLLSLKEFLAT	288	GTP K
15	176	SSPNLLTLEEFLS	289	GDP L
	380, 381, 140	KTYSLYEFLEL	290	GTP N
	409, 24R2	MSNRYTIYEFLLNLS	291	GTP Y
	320	LHWWEVLAEK	292	GDP CWL
	230	SSPQPLLHWWENMTTEP	293	GDP KNK
20	213	SRAGESVHWWEVL	294	GDP H
	266	RAGPSEHWWEYIATL	295	GDP N
	237	EMISWHQYLLSIENN	296	GDP PARO
	126, 128, 133, 242, 248	SSLRWDEFLMELGGGVA	297	BUF M
	379	VPWWVWLAEGD	298	GTP N
25	196	SREIYWWDWLTDT	299	GDP D
	117	FGSNMLDLPTFLDWL	300	BUF PARO
	92	SRITFWELMLEGG	301	BUF L
	179	SRTPYEWLGYWGA	302	GDP L
	289	YDMCTWLEFLDGGEC	303	GDP X14CW
30	265	SPLCTWAEYLMERPSC	304	GDP N
	273	TQWCTWAEFLSSTDC	305	GDP M
	272, 282, 6R2	SSDGCTWQEFLAGHCPC	306	GDP N
	337, 339	PFNNPPWMWWS	307	GDP P
	268	SSPTVHENLPPWLWWSP	308	GDP N
35	330	LIHVPPWAWYD	309	GDP P
	329	GFDVPPWYWDF	310	GDP P
	280	YSQVFGDAPVWAWYSSR	311	GDP X14CW
	319	WTPSDWQWWSK	312	GDP CWL
	115	SSHWSSDSIFPGFWYSG	313	BUF PARO
40	197	SRGGVDLDIGNSA	314	GDP D
	347	EGEDVTRIAN	315	GDP R

## SEQUENCE LISTING

<110> PAIGE, Lisa A.  
MCDONNELL, Donald P.  
CHANG, Ching Yu  
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<120> METHOD OF PREDICTING THE ABILITY OF COMPOUNDS TO  
MODULATE THE BIOLOGICAL ACTIVITY OF RECEPTORS

<130> PAIGE1D

<140> 09/429,331  
<141> 1999-10-28

<150> PCT/US99/06664  
<151> 1999-03-26

<150> 60/082,756  
<151> 1998-04-23

<150> 60/099,656  
<151> 1998-09-09

<150> 60/115,345  
<151> 1999-01-08

<160> 315

<170> PatentIn Ver. 2.0

<210> 1  
<211> 20  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 1  
Ser Ser Asn His Gln Ser Ser Arg Leu Ile Glu Leu Leu Ser Arg Ser  
1 5 10 15  
Gly Ser Gly Lys  
20

<210> 2  
<211> 8  
<212> PRT  
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peptide

<220>

<223> Xaa at positions 5 and 6 can be any amino acid residue

<400> 2

Ser Arg Leu Leu Xaa Xaa Leu Leu  
1 5

<210> 3

<211> 23

<212> DNA

<213> Xenopus laevis

<400> 3

gatctaggtc acagtgaacct gcg

23

<210> 4

<211> 23

<212> DNA

<213> Xenopus laevis

<400> 4

gatccgcagg tcaactgtgac cta

23

<210> 5

<211> 85

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial: Selected sequence from  
combinatorial library

<400> 5

gactgtgcga attcgggtcat gaaccattaa ctttattaga aagattatta atggatgata 60  
aacaagctgt tctcgagcgt gtcag 85

<210> 6

<211> 73

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial: Selected sequence from  
combinatorial library

<400> 6

gactgtgcga attctcttct ttaacttcta gagattttgg ttcttggat gettctagac 60  
tegagcgtgt cag 73

<210> 7

<211> 73

<212> DNA

<213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial: Selected sequence from  
combinatorial library

&lt;400&gt; 7

gactgtgcga attctcttct tgggatatgc atcaattttt ttgggaaggt gtttctagac 60  
tcgagcgtgt cag 73

&lt;210&gt; 8

&lt;211&gt; 73

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial: Selected sequence from  
combinatorial library

&lt;400&gt; 8

gactgtgcga attctcttct ccagggttcta gagaatgggt taaagatatg ttatctagac 60  
tcgagcgtgt cag 73

&lt;210&gt; 9

&lt;211&gt; 14

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial: Selected sequence from  
combinatorial library

&lt;400&gt; 9

ctgacacgct cgag

14

&lt;210&gt; 10

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 10

Gly His Glu Pro Leu Thr Leu Leu Glu Arg Leu Leu Met Asp Asp Lys  
1 5 10 15

Gln Ala Val

&lt;210&gt; 11

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 11  
 Ser Ser Trp Asp Met His Gln Phe Phe Trp Glu Gly Val Ser Arg  
           1                  5                  10                  15

<210> 12  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 - <223> Description of Artificial Sequence:Arbitrary  
           peptide

<400> 12  
 Ser Ser Pro Gly Ser Arg Glu Trp Phe Lys Asp Met Leu Ser Arg  
           1                  5                  10                  15

<210> 13  
 <211> 15  
 <212> PRT  
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<220>  
 <223> Description of Artificial Sequence:Arbitrary  
           peptide

<400> 13  
 Ser Ser Leu Thr Ser Arg Asp Phe Gly Ser Trp Tyr Ala Ser Arg  
           1                  5                  10                  15

<210> 14  
 <211> 88  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:DNA encoding random  
           peptide library of Ex. 101.1

<220>  
 <223> N at each occurrence is A, C, G or T; K at each  
           occurrence is C or T

<400> 14  
 agtgtgtgcc tcgagannkn nknnknknkn knnnknknctg nnknknctgc tgnnnknknkn 60  
 knnnknknknkn nnktctagac tgtgcagt 88

<210> 15  
 <211> 15  
 <212> DNA  
 <213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:DNA complementing  
3' end of SEQ ID NO:14

<400> 15  
actgcacagt ctaga

<210> 16  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 16  
Asp Ser Lys Gly Gln Thr Lys Leu Leu Gln Leu Leu Thr Thr Lys Ser  
1 5 10 15

Asp Gln Met

<210> 17  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 17  
Leu Lys Glu Lys His Lys Ile Leu His Gln Leu Leu Gln Asp Ser Ser  
1 5 10 15

Ser Pro Val

<210> 18  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 18  
Lys Lys Lys Glu Asn Ala Leu Leu Arg Tyr Leu Leu Asp Lys Asp Asp  
1 5 10 15

Thr Lys Asp

<210> 19  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 19  
Tyr Ser Gln Thr Ser His Lys Leu Val Lys Leu Leu Thr Thr Thr  
1 5 10

Ala Glu Gln Gln

<210> 24  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 24  
Ser Arg Gly Glu Leu Thr Thr Trp Tyr Glu Phe Leu Ser His Gly Arg  
1 5 10 15

Pro

<210> 25  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 25  
Asp Glu Leu Thr Trp Trp Glu Phe Ile Ser Asp  
1 5 10

<210> 26  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 26  
Val Thr Trp Tyr Asp Phe Leu Met Glu Asp Thr Lys  
1 5 10

<210> 27  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 27  
Gly Leu Met Thr Trp Arg Glu Phe Leu Gln Glu  
1 5 10



<210> 28  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 28  
Asn Leu Met Thr Trp Tyr Glu Tyr Leu Ala Asp Gly Glu Arg Leu  
1 5 10 15

<210> 29  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 29  
Ala Asp Arg Leu Trp Thr Trp Gln Glu Phe Leu Tyr  
1 5 10

<210> 30  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 30  
Lys Thr Tyr Ser Leu Tyr Glu Phe Leu Glu Leu  
1 5 10

<210> 31  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 31  
Ser Ser Gln Leu Leu Thr Leu His Glu Phe Leu Asn Ser  
1 5 10

<210> 32

<211> 15  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 32  
Ser Ser Arg Gly Glu Tyr Trp Trp Glu Phe Leu Gly Tyr Ser Arg  
1 5 10 15

<210> 33  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 33  
Ser Ser Ala Asp Gly Ile Phe Trp Trp Glu Tyr Ala Arg Glu Ala Gly  
1 5 10 15

Glu

<210> 34  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 34  
Leu Gly Arg Gly Thr Thr Asp Met Pro Pro Trp Ala Trp Trp Ser  
1 5 10 15

<210> 35  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 35  
Asn Tyr Thr Glu Arg Pro Trp Val Trp Tyr His  
1 5 10

<210> 36

<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 36  
Ser Ser Leu Tyr Ser Met Glu Pro Trp Lys Trp Tyr Thr  
1 5 10

<210> 37  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 37  
Lys Trp Trp Glu Ser Asp Trp Phe Val Asn Phe Gly  
1 5 10

<210> 38  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 38  
Glu Glu Gly Met Asp Trp Phe Met Arg Val Val Glu  
1 5 10

<210> 39  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 39  
Ser Val Leu Ser Ser Ser Glu Met Cys Phe Gly Trp Ala Cys Tyr  
1 5 10 15

<210> 40  
<211> 10  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 40

Ser Glu Met Cys Phe Gly Trp Ala Cys Tyr  
1 5 10

<210> 41

<211> 11

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Arbitrary peptide

<400> 41

Phe Asn Glu Val Cys Leu Gly Trp Gln Cys Tyr  
1 5 10

<210> 42

<211> 19

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Arbitrary peptide

<400> 42

Ser Ser Asn Ala Arg Pro Cys Gln Gly Trp His Cys Tyr Leu Pro Ser  
1 5 10 15

Gln Ser Arg

<210> 43

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 43

Trp Asp Gly Gly Val Trp Met Gly Pro Ala Ser  
1 5 10

<210> 44

<211> 15

<212> PRT

<213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Arbitrary peptide

&lt;400&gt; 44

Met Gly Asp Ser Val Leu Pro Tyr Gly Gly Val Trp Leu Gly Pro  
1 5 10 15

&lt;210&gt; 45

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Arbitrary peptide

&lt;400&gt; 45

Ser Arg Tyr Gly Gly Val Trp Leu Gly Pro Glu Gly Asn Ser Arg  
1 5 10 15

&lt;210&gt; 46

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Arbitrary peptide

&lt;400&gt; 46

Ser Ser Trp Asp Gly Gly Val Trp Trp Gly Gln Tyr Gly Ser Arg  
1 5 10 15

&lt;210&gt; 47

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Arbitrary peptide

&lt;400&gt; 47

Ser Ser Asn Leu Asp Gly Cys Phe Thr Ser Gly Gly Val Trp Ser Gly  
1 5 10 15

Cys Ser Arg

&lt;210&gt; 48

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 48

Leu Gly Tyr Asp Ile Asn Gly Val Trp Ile Gly  
1 5 10

<210> 49

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 49

Ile Cys Asp Ile Ile Pro Trp Glu Glu Ser Cys Ser Arg  
1 5 10

<210> 50

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 50

Ala Cys Gly Pro Ala Ile Cys Pro Trp Asp Phe Met Pro Gln Leu  
1 5 10 15

<210> 51

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 51

Ser Arg Gly Pro Gln Leu Thr Trp Gln Glu Phe Leu Thr Gly Ala Ala  
1 5 10 15

Ser Ser Arg

<210> 52

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 52

Asn Val Val Thr Trp Trp Glu Phe Leu Gly Pro  
1 5 10

<210> 53

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 53

Ser Arg Glu Phe Val Thr Trp Lys Glu Phe Leu Gly Ser  
1 5 10

<210> 54

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 54

Ser Gln Leu Thr Trp Arg Glu Phe Leu Phe Gly  
1 5 10

<210> 55

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 55

Ser Ser His Leu Met Thr Trp His Glu Phe Ile Ser Asp  
1 5 10

<210> 56

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 56

Ser Arg Asp Gly Phe Glu Thr Trp Ala Glu Phe Leu Gly Ala Ser Gly  
1 5 10 15

Ser

<210> 57

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 57

Ser Arg Leu Thr Trp Ser Glu Tyr Leu Ser Glu Ile Asp Pro  
1 5 10

<210> 58

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 58

Ser Arg Thr Val Thr Trp Val Asp Phe Leu Lys Glu Thr  
1 5 10

<210> 59

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 59

Ser Ser Lys Tyr Ser Tyr Ser Arg Ser Ser Glu Gly His Ser Arg  
1 5 10 15

<210> 60

<211> 15

<212> PRT

<213> Artificial Sequence

<220>



<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 60

Ser Ser Tyr Gln Trp Glu Thr His Ser Asp Lys Trp Arg Ser Arg  
1 5 10 15

<210> 61

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 61

Ser Ser Val Thr Lys Lys Ala Leu Thr Ile Ala Lys Asp Ser Arg  
1 5 10 15

<210> 62

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 62

Ser Ser Asn His Gln Ser Ser Arg Leu Ile Glu Leu Leu Ser Arg  
1 5 10 15

<210> 63

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 63

Ser Arg Leu Lys Glu Leu Leu Leu Leu Pro Thr Asp Leu Ser Arg  
1 5 10 15

<210> 64

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 64

Ser Ser Lys Leu Tyr Cys Leu Leu Asp Glu Ser Tyr Cys Ser Arg  
1 5 10 15

&lt;210&gt; 65

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 65

His Gly Pro Leu Thr Leu Asn Leu Leu Arg Ser Ser Gly Gly  
1 5 10

&lt;210&gt; 66

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 66

Ser Arg Leu Glu Tyr Trp Leu Lys Trp Glu Pro Gly Pro Ser Arg  
1 5 10 15

&lt;210&gt; 67

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 67

Ser Ser Cys Lys Trp Tyr Glu Lys Cys Ser Gly Leu Trp Ser Arg  
1 5 10 15

&lt;210&gt; 68

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 68

Ser Ser Glu Tyr Cys Phe Tyr Trp Asp Ser Ala His Cys Ser Arg  
1 5 10 15

<210> 69

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 69

Ser Ser Trp Val Leu Leu Arg Asp Leu Pro Trp Gly Ser Arg  
1 5 10

<210> 70

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 70

Ser Ser Trp Val Arg Leu Ser Asp Phe Pro Trp Gly Val Ser Arg  
1 5 10 15

<210> 71

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 71

Ser Ser Leu Thr Ser Arg Asp Phe Gly Ser Trp Tyr Ala Ser Arg  
1 5 10 15

<210> 72

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 72

Ser Arg Thr Trp Glu Ser Pro Leu Gly Thr Trp Glu Trp Ser Arg  
1 5 10 15

<210> 73  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 73  
Ser Ala Ala Cys Ala Thr Ile Ser His Tyr Leu Met Gly Gly  
1 5 10

<210> 74  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 74  
Ser Arg Asn Leu Cys Phe Phe Trp Asp Asp Glu Tyr Cys Ser Arg  
1 5 10 15

<210> 75  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 75  
Ser Trp Asp Met His Gln Phe Phe Trp Glu Gly Val Ser Arg  
1 5 10

<210> 76  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 76  
Ser Arg Trp His Gly Thr Leu Phe Trp Gln Asp Glu Gln Ser Arg  
1 5 10 15

<210> 77  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 77  
Ser Ser Cys Lys Trp Tyr Glu Lys Cys Ser Gly Leu Trp Ser Arg  
1 5 10 15

<210> 78  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 78  
Ser Ser Arg Met Gly His Val Trp Tyr Asp Trp Thr Phe Ser Arg  
1 5 10 15

<210> 79  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 79  
Ser Ser Arg Leu Leu Gly Asp Phe Gly Gly Ser Val Val Ser Arg  
1 5 10 15

<210> 80  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 80  
Ser Ser Lys Tyr Val Phe Gly Phe Gln Val Ala Gly Gly Ser Arg  
1 5 10 15

<210> 81  
<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 81

Ser Ser Trp Ala Gly Ile Lys Phe Gly Lys Pro Pro His Ser Arg  
1 5 10 15

<210> 82

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 82

Ser Ser Ser Trp Ser Tyr Gly Lys Pro Thr Phe Leu Ser Ser Arg  
1 5 10 15

<210> 83

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 83

Ser Arg Asp Thr Gly Asp Met Trp Trp Gly Arg Gly Gly Ser Arg  
1 5 10 15

<210> 84

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 84

Ser Ser Gly Arg Tyr Asp Pro Phe Val Leu Asn Ala Ala Ser Arg  
1 5 10 15

<210> 85

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 85

Ser Ser Ser Pro Trp Trp Ser Phe Asn Leu Arg Asp Met Ser Arg  
1 5 10 15

<210> 86

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 86

Ser Ser Trp Pro Tyr Leu Pro Lys Arg Glu Glu Trp Ala Ser Arg  
1 5 10 15

<210> 87

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 87

Ser Ser Gly Trp Ile Glu Gln Lys Leu Arg Gly Ser Phe Ser Arg  
1 5 10 15

<210> 88

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 88

Ser Ser Ser Ala Thr Ser Ile Lys Val Gln Tyr Gln Ile Ser Arg  
1 5 10 15

<210> 89

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 89

Ser Ser Tyr Leu Thr Leu Gly Lys Ser Met Met Ala Ile Ser Arg  
1 5 10 15

<210> 90

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 90

Ser Ser Trp His Ser Arg Trp Asp Leu Ala Leu Gly Phe Ser Arg  
1 5 10 15

<210> 91

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 91

Ser Ser Gly Tyr Trp Gly Gly Trp Asp Tyr Gly Ala Gly Ser Arg  
1 5 10 15

<210> 92

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 92

Ser Arg Asp Asn Cys Gly Ala Gly Leu Trp Ala Gly Cys Ser Arg  
1 5 10 15

<210> 93

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide



&lt;400&gt; 93

Ser Ser Ser Thr Pro Gly Trp Trp Glu Trp Asp Trp Ala Ser Arg  
1 5 10 15

&lt;210&gt; 94

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 94

Ser Ser Tyr Trp Asp Gly Ser Trp Arg Arg Lys Glu Thr Cys Val Ser  
1 5 10 15

Cys Ser Arg

&lt;210&gt; 95

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 95

Ser Ser Arg Thr Ala Glu Asp Tyr Cys Phe Phe Ala Asp Asp Tyr Trp  
1 5 10 15

Cys Ser Arg

&lt;210&gt; 96

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 96

Ser Ser Arg Ala Leu Ala Leu Phe Pro Val Gly Met Glu Ser Arg  
1 5 10 15

&lt;210&gt; 97

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 97

Ser Ser Asp Cys Glu Ser Leu Thr Ser Tyr Pro His Leu Lys Ala Leu  
1 5 10 15

Cys Ser Arg

&lt;210&gt; 98

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 98

Ser Ser Thr Ala Thr Ala Leu Arg Asp Arg Leu Ala Tyr Ser Arg  
1 5 10 15

&lt;210&gt; 99

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 99

Ser Ser Gly Lys Thr Arg Glu His Tyr Arg Glu Gly Thr Ser Arg  
1 5 10 15

&lt;210&gt; 100

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 100

His Ser His Asn His His Ser Pro Trp Leu Phe Arg Leu Leu Gly Gly  
1 5 10 15

&lt;210&gt; 101

&lt;211&gt; 16

&lt;212&gt; PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 101

His Ser His Pro His His Ser His Leu Leu Tyr Lys Leu Met Gly Gly  
1 5 10 15

<210> 102

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 102

His Ser His Pro Leu Pro Pro Leu Leu Ser Arg Leu Leu Thr Gly Gly  
1 5 10 15

<210> 103

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 103

Ser Arg Leu Thr Cys Leu Leu Gln Ser Asn Gly Trp Asp Ser Glu Gln  
1 5 10 15

Cys Ser Arg

<210> 104

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 104

Ser Ser Leu Thr Ser Arg Asp Phe Gly Ser Trp Tyr Ala Ser Arg  
1 5 10 15

<210> 105

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 105

Ser Arg Thr Leu Gln Leu Asp Trp Gly Thr Leu Tyr Ser Arg  
1 5 10

<210> 106

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 106

Ser Arg Leu Pro Pro Ser Val Phe Ser Met Cys Gly Ser Glu Val Cys  
1 5 10 15

Leu Ser Arg

<210> 107

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 107

Ser Arg Phe Glu Ile Trp Lys Pro Glu Pro Gly Cys Val Ser Ser Leu  
1 5 10 15

Glu Asn Trp Glu Pro Gly Lys Arg Val Cys Ser Arg  
20 25

<210> 108

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 108

Ser Arg Val Phe Gly Val Ser Gly Gly Glu Val Val Leu Ile Asn Gly  
1 5 10 15

Ser Ser Arg

<210> 109

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 109

Ser	Arg	Leu	Cys	Phe	Gly	Asp	Trp	Cys	Met	Leu	Gly	Gly	Val	Asp	Val
1				5					10					15	

Leu Ser Arg

<210> 110

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 110

Ser	Ser	Leu	Asn	Met	Val	Val	Asp	Thr	Pro	Trp	Cys	Gly	Lys	Trp	Val
1				5					10					15	

Cys Ser Arg

<210> 111

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 111

Ser	Ser	Arg	Pro	Asp	Ala	Ala	Phe	Phe	Gly	Ala	Lys	Leu	Ser	Arg
1				5					10					15

<210> 112

<211> 15

<212> PRT

<213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 112

Ser Ser Arg Pro Ser Pro Ser Phe Trp Glu Lys Gln Leu Ser Arg  
1 5 10 15

&lt;210&gt; 113

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 113

Ser Ser Arg Pro Thr Ala Glu Trp Phe Arg Glu Asn Leu Ser Arg  
1 5 10 15

&lt;210&gt; 114

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 114

Ser Arg Trp Trp Asp Thr Ser Trp Trp Leu Glu Glu Leu Ser Arg  
1 5 10 15

&lt;210&gt; 115

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 115

Ser Ser Arg Ile Ala Asp Leu Phe Trp Arg Leu Glu Pro Ser Arg  
1 5 10 15

&lt;210&gt; 116

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence:Arbitrary

## peptide

&lt;400&gt; 116

Ser Arg Ser Tyr His Gly Glu Trp Gly Val Trp Thr Leu Ser Arg  
1 5 10 15

&lt;210&gt; 117

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 117

Ser Ser Asp Trp Cys Phe Gly Trp Gly Gly Trp Cys Ala Ser Glu Ala  
1 5 10 15

Val Ser Arg

&lt;210&gt; 118

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 118

Ser Arg Asn Trp Asp Trp Ala Ala Leu Glu Leu Leu Pro Tyr Pro His  
1 5 10 15

Pro Ser Arg

&lt;210&gt; 119

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 119

Ser Ser Leu Thr Ser Arg Asp Phe Gly Ser Trp Tyr Ala Ser Arg  
1 5 10 15

&lt;210&gt; 120

&lt;211&gt; 15

&lt;212&gt; PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 120

Ser Arg Ser Pro Ile Leu Thr His Leu Leu Ser Leu Gly Ser Arg  
1 5 10 15

<210> 121

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 121

Ser Ser Thr Gly Ile Leu Trp Lys Leu Leu Thr Ala Glu Ser Arg  
1 5 10 15

<210> 122

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 122

Ser Ser His Gly Ile Leu Trp Arg Leu Leu Ser Glu Gly Ser Arg  
1 5 10 15

<210> 123

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 123

Ser Arg Ser Asp Ser Ile Leu Trp Arg Met Leu Ser Glu Ser Arg  
1 5 10 15

<210> 124

<211> 15

<212> PRT

<213> Artificial Sequence



<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 124  
Ser Arg Leu Val Ala Leu Leu Lys Ser Pro Trp Ser Val Ser Arg  
1 5 10 15

<210> 125  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 125  
Ser Arg Leu Glu Glu Leu Leu Leu Met Asp Phe Trp Arg Ser Arg  
1 5 10 15

<210> 126  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 126  
Ser Ser Lys Leu Trp Gln Leu Leu Ser Ser Pro Ile Asp Ser Arg  
1 5 10 15

<210> 127  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 127  
Ser Ser Lys Leu Tyr Cys Leu Leu Asp Glu Ser Tyr Cys Ser Arg  
1 5 10 15

<210> 128  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary

## peptide

&lt;400&gt; 128

Ser Arg Ser Leu Leu Met Asp Met Leu Met Ser Asp Asp Tyr Val Thr  
1 5 10 15

Val Ser Arg

&lt;210&gt; 129

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 129

Ser Ser Arg Leu Leu Ala Cys Glu Leu Met Tyr Glu Asp Ala Asp Val  
1 5 10 15

Cys Ser Arg

&lt;210&gt; 130

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 130

His Ser His Ser Pro Leu Leu Met Ala Leu Leu Ala Pro Pro Gly Gly  
1 5 10 15

&lt;210&gt; 131

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 131

Ser Arg Leu Glu Tyr Tyr Leu Arg Leu Gly Thr Tyr Glu Ser Arg  
1 5 10 15

&lt;210&gt; 132

&lt;211&gt; 15

&lt;212&gt; PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 132

Ser Ser Cys Leu Arg Glu Ile Leu Leu Tyr Gly Ala Cys Ser Arg  
1 5 10 15

<210> 133

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 133

Ser Ser Arg Thr Ala Glu Asp Tyr Cys Phe Phe Ala Asp Asp Tyr Trp  
1 5 10 15

Cys Ser Arg

<210> 134

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 134

Ser Ser Leu Arg Cys Tyr Leu Ser Ser Ser Lys Val Asp Gln Trp Ala  
1 5 10 15

Cys Ser Arg

<210> 135

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 135

Ser Ser Tyr Lys Pro His Ser Leu Leu Glu Trp His Leu Leu Gly Gly  
1 5 10 15

Thr Ser Arg

<210> 136  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 136  
Ser Arg Leu His Cys Leu Leu Asp Ser Ser Tyr Cys Ser Ser Arg  
1 5 10 15

<210> 137  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 137  
Ser Arg Leu His Cys Leu Leu Asp Ser Ser Tyr Cys Ser Ser Arg  
1 5 10 15

<210> 138  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 138  
Ser Ser Trp Pro Asn Pro Thr Phe Trp Glu Arg Gln Leu Ser Arg  
1 5 10 15

<210> 139  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 139  
Ser Tyr Ser Lys Glu Trp Phe Glu Glu Arg Leu Asn Ser Arg  
1 5 10

<210> 140  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 140  
Ser Ser Ser Met Met Arg Glu Phe Phe Glu Arg Glu Leu Ser Arg  
1 5 10 15

<210> 141  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 141  
Ser Ser Gly Leu Pro Pro Asn Phe Glu Arg Met Leu Lys Ser Arg  
1 5 10 15

<210> 142  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 142  
Ser Ser Gly Pro Trp Leu Met His Tyr Leu Gly Gly Gly Ser Arg  
1 5 10 15

<210> 143  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 143  
Ser Ser Thr Ser Trp Leu His His Tyr Leu Met Gly Thr Ser Arg  
1 5 10 15

<210> 144  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 144  
Ser Arg Gly Gly Gly Glu Cys Leu Gly Pro Trp Cys Leu Ser Arg  
1 5 10 15

<210> 145  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 145  
Ser Ser Glu Ala Cys Val Gly Arg Trp Met Leu Cys Glu Gln Leu Gly  
1 5 10 15

Val Ser Arg

<210> 146  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 146  
Ser Ser Gln Val Trp Pro Gly Pro Trp Arg Leu Val Glu Ser Arg  
1 5 10 15

<210> 147  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 147  
Ser Ser Ser Leu Gly Pro Trp Arg Leu Ser Glu Leu Glu Ser Arg  
1 5 10 15

<210> 148  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 148  
Ser Ser Ser Gly Pro Trp Arg Trp Gly Leu Ser Ile Glu Ser Arg  
1 5 10 15

<210> 149  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 149  
Ser Arg Glu Cys Val Gly Gly Trp Cys Leu Ala Glu Leu Ser Arg  
1 5 10 15

<210> 150  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 150  
Ser Ser Ile Pro Pro Arg Ser Trp Trp Leu Ser Gln Leu Ser Arg  
1 5 10 15

<210> 151  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 151  
Ser Ser Trp Pro Gly Ala Glu Trp Phe Lys Glu Gln Leu Ser Arg  
1 5 10 15

<210> 152

<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 152  
Ser Ser Lys Leu Tyr Cys Leu Leu Asp Glu Ser Tyr Cys Ser Arg  
1 5 10 15

<210> 153  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 153  
His Ser Tyr Ser Ser His Pro Leu Leu Leu Ser Tyr Leu Trp Gly Gly  
1 5 10 15

<210> 154  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 154  
His Ser Trp Leu Gly Pro Trp Arg Leu Ser Ser Ile Asp Leu Gly Gly  
1 5 10 15

<210> 155  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 155  
His Ser Thr Asp Met Gly Trp Leu Arg Pro Trp Arg Leu Leu Gly Gly  
1 5 10 15

<210> 156  
<211> 15  
<212> PRT



<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 156

Ser Ser Val Phe Thr Ile Met Asp Gly Lys Val Ala Leu Ser Arg  
1 5 10 15

<210> 157

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 157

Ser Arg Pro Tyr Cys Leu Gly Asp Val Trp Cys Leu Asp Ser Arg  
1 5 10 15

<210> 158

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 158

Ser Arg Glu Trp Glu Asp Gly Phe Gly Gly Arg Trp Leu Ser Arg  
1 5 10 15

<210> 159

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 159

Ser Ser Trp Asn Ser Arg Glu Phe Phe Leu Ser Gln Leu Ser Arg  
1 5 10 15

<210> 160

<211> 15

<212> PRT

<213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 160

Ser Ser Thr Thr Met Phe Asp Phe Phe Tyr Glu Arg Leu Ser Arg  
1 5 10 15

&lt;210&gt; 161

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 161

Ser Ser Ala Arg Pro Trp Trp Leu Gln Phe Glu Gly Ser Ser Arg  
1 5 10 15

&lt;210&gt; 162

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 162

Ser Ser Gln Glu Glu Trp Leu Leu Pro Trp Arg Leu Ala Ser Arg  
1 5 10 15

&lt;210&gt; 163

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 163

Ser Arg Leu Pro Pro Ser Val Phe Ser Met Cys Gly Ser Glu Val Cys  
1 5 10 15

Leu Ser Arg

&lt;210&gt; 164

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 164

Ser Ser Gly Pro Phe Tyr Val Gly Gly Met Leu Trp Pro Ala Asp Cys  
1 5 10 15

Leu Ser Arg

&lt;210&gt; 165

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 165

Ser Arg Glu Gly Trp Met Gly Pro Trp Arg Leu Ala Asp Ser Arg  
1 5 10 15

&lt;210&gt; 166

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 166

Ser Arg Asn Glu Cys Ile Gly Pro Trp Cys Leu Thr Ile Ser Arg  
1 5 10 15

&lt;210&gt; 167

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 167

Ser Ser Pro Gly Ser Arg Glu Trp Phe Lys Asp Met Leu Ser Arg  
1 5 10 15

&lt;210&gt; 168

&lt;211&gt; 15

&lt;212&gt; PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 168

Ser Ser Val Ala Ser Arg Glu Trp Trp Val Arg Glu Leu Ser Arg  
1 5 10 15

<210> 169

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 169

Ser Arg Met Phe Gln Val Cys Gly Asp Glu Val Cys Leu Arg Ser Arg  
1 5 10 15

<210> 170

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 170

Ser Ser Asp Leu His Arg Asp Cys Leu Gly Val Trp Cys Leu Ser Arg  
1 5 10 15

<210> 171

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary peptide

<400> 171

Ser Arg Leu Asn Gly Val Phe Cys His Asp Ser Ser Asp Leu Trp Val  
1 5 10 15

Cys Ser Arg

<210> 172

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 172

Ser Arg Pro Gly Cys Leu Arg Gly Val Trp Cys Leu Ala Asp Thr Pro  
1 5 10 15

Pro Ser Arg

<210> 173

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 173

Ser Ser Arg Leu Val Pro His Ser Phe Trp Leu Asp Gly Leu Met His  
1 5 10 15

Gly Ser Arg

<210> 174

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 174

Ser Ser Ile Ser Thr Tyr His Met Gly Glu Trp Phe Tyr Ala Met Leu  
1 5 10 15

Ser Ser Arg

<210> 175

<211> 18

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 187

Ser Ser Ile Lys Asp Phe Pro Asn Leu Ile Ser Leu Leu Ser Arg  
1 5 10 15

<210> 188

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 188

Ser Ser Gly Ser Ser Ala Gly Arg Leu Met Met Leu Leu Gln Asp Gly  
1 5 10 15

Val Ser Arg

<210> 189

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 189

Ser Arg Glu Gly Leu Leu Met Arg Leu Leu Ile Gly Asp Ser Arg  
1 5 10 15

<210> 190

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 190

Ser Ser His Cys His Thr Arg Leu Cys Ser Leu Leu Thr Ser Arg  
1 5 10 15

<210> 191

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 191

Ser Ser Arg Leu Leu Cys Leu Leu Asp Ala Gly Gln Cys Ser Arg  
1 5 10 15

<210> 192

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 192

Ser Arg Asn Leu Leu Cys Leu Leu Asp Gln Glu Ala Cys Ser Arg  
1 5 10 15

<210> 193

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 193

Ser Ser Leu Lys Cys Leu Leu Asn Ser Asn Phe Cys Ser Arg  
1 5 10

<210> 194

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 194

Ser Ser Leu Lys Cys Leu Leu Gln Ser Ser Pro Gln Lys Gln Pro Phe  
1 5 10 15

Cys Ser Arg

<210> 195

<211> 15

<212> PRT

<213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 195

Ser	Ser	Arg	Thr	Leu	Leu	Glu	His	Tyr	Leu	Leu	Gly	Gly	Ser	Arg
1				5					10				15	

&lt;210&gt; 196

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 196

Ser	Ser	Ala	Gly	Leu	Leu	Glu	Asp	Met	Leu	Arg	Ser	Arg	Ser	Arg
1				5					10				15	

&lt;210&gt; 197

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 197

Ser	Ser	Arg	Cys	Ser	Ser	Leu	Leu	Cys	Glu	Met	Leu	Ile	Gln	Thr	Lys
1				5					10					15	

Glu Ser Arg

&lt;210&gt; 198

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 198

Ser	Ser	Leu	Gln	Ala	Gly	Ser	Trp	Leu	Met	His	Tyr	Leu	Arg	Gly	Gly
1				5					10					15	

Asp Ser Arg



<210> 199  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 199  
Ser Arg Pro Glu Gly Ser Ser Trp Leu Leu His Tyr Leu Ser Arg  
1 5 10 15

<210> 200  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 200  
Ser Ser Arg Thr Leu Leu Glu His Tyr Leu Leu Gly Gly Ser Arg  
1 5 10 15

<210> 201  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 201  
Ser Arg Trp Trp Leu Asp Asp His Glu Leu Leu Leu Tyr Ser Ser Arg  
1 5 10 15

<210> 202  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 202  
Ser Ser Arg Thr Leu Tyr Cys His Leu Thr Ser Ser Asn Pro Glu Trp  
1 5 10 15

Cys Ser Arg

<210> 203  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 203  
Ser Ser Thr Arg Leu Met Cys Trp Leu Gly Ser Ala Asp Thr Ser His  
1 5 10 15

Cys Ser Arg

<210> 204  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 204  
Ser Ser Tyr Asp Trp Gln Cys Pro Ser Trp Tyr Cys Pro Ala Pro Pro  
1 5 10 15

Ser Ser Arg

<210> 205  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 205  
Ser Ser Thr Thr Trp Arg Cys Pro Glu Trp Tyr Cys Gly Ser Arg  
1 5 10 15

<210> 206  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 206

Ser Ser Trp Asp Phe Arg Val Pro Trp Trp Tyr Asn Asn Ser Arg  
1 5 10 15

<210> 207

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 207

Ser Ser Gln Trp Gln Ala Pro Trp Trp Tyr Ile Asp Ala Ser Arg  
1 5 10 15

<210> 208

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 208

Ser Ser Arg Pro Ser Phe Thr Ile Pro Trp Trp Phe Asp Asp Pro Ser  
1 5 10 15

Arg Ser Arg

<210> 209

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 209

Ser Ser Tyr Glu Ile Pro Lys Trp Ala Leu Gln Trp Leu Ser Arg  
1 5 10 15

<210> 210

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 210  
Ser Ser Leu Asp Leu Ser Gln Phe Pro Met Thr Ala Ser Phe Leu Arg  
1 5 10 15

Glu Ser Arg

<210> 211  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 211  
Ser Ser Asn His Gln Ser Ser Arg Leu Ile Glu Leu Leu Ser Arg  
1 5 10 15

<210> 212  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 212  
Ser Ala Pro Arg Ala Thr Ile Ser His Tyr Leu Met Gly Gly  
1 5 10

<210> 213  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 213  
Ser Ser Trp Asp Met His Gln Phe Phe Trp Glu Gly Val Ser Arg  
1 5 10 15

<210> 214  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary

## peptide

<400> 214  
Ser Arg Leu Pro Pro Ser Val Phe Ser Met Cys Gly Ser Glu Val Cys  
1 5 10 15

Leu Ser Arg

<210> 215  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 215  
Ser Ser Pro Gly Ser Arg Glu Trp Phe Lys Asp Met Leu Ser Arg  
1 5 10 15

<210> 216  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 216  
Ser Ser Glu Tyr Cys Phe Tyr Trp Asp Ser Ala His Cys Ser Arg  
1 5 10 15

<210> 217  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 217  
Ser Ser Leu Thr Ser Arg Asp Phe Gly Ser Trp Tyr Ala Ser Arg  
1 5 10 15

<210> 218  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 218  
Ser Arg Thr Trp Glu Ser Pro Leu Gly Thr Trp Glu Trp Ser Arg  
1 5 10 15

<210> 219  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 219  
Ser Arg Glu Trp Glu Asp Gly Phe Gly Gly Arg Trp Leu Ser Arg  
1 5 10 15

<210> 220  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 220  
Ser Ser Leu Asp Leu Ser Gln Phe Pro Met Thr Ala Ser Phe Leu Arg  
1 5 10 15

Glu Ser Arg

<210> 221  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 221  
Ser Ser Glu Ala Cys Val Gly Arg Trp Met Leu Cys Glu Gln Leu Gly  
1 5 10 15

Val Ser Arg

<210> 222  
<211> 15

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 222  
Ser Arg Ala Gly Leu Leu Ser Asp Leu Leu Glu Gly Lys Ser Arg  
1 5 10 15

<210> 223  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 223  
Ser Ser Arg Ser Leu Leu Arg Asp Leu Leu Met Val Asp Ser Arg  
1 5 10 15

<210> 224  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 224  
Ser Ser Asn Lys Leu Leu Tyr Asn Leu Leu Lys Met Glu Ser Arg  
1 5 10 15

<210> 225  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 225  
Ser Ser Lys Ser Leu Leu Leu Asn Leu Leu Ser Thr Pro Ser Arg  
1 5 10 15

<210> 226  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 226

His Ser Phe Pro Arg Glu Ser Leu Leu Val Arg Leu Leu Gln Gly Gly  
1 5 10 15

<210> 227

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 227

Ser Arg Leu Glu Met Leu Leu Arg Ser Glu Thr Asp Phe Ser Arg  
1 5 10 15

<210> 228

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 228

Ser Arg Leu Glu Glu Leu Leu Lys Trp Gly Ser Val Thr Ser Arg  
1 5 10 15

<210> 229

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 229

Ser Arg Leu Glu Gln Leu Leu Lys Glu Glu Phe Ser Tyr Ser Arg  
1 5 10 15

<210> 230

<211> 15

<212> PRT

<213> Artificial Sequence

<220>



<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 230

Ser Arg Leu Glu Gln Leu Leu Arg Ser Glu Pro Asp Phe Ser Arg  
1 5 10 15

<210> 231

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 231

Ser Arg Leu Glu Asp Leu Leu Arg Ala Pro Phe Thr Thr Ser Arg  
1 5 10 15

<210> 232

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 232

Ser Arg Leu Glu Ser Leu Leu Arg Phe Gly Gln Leu Asp Ser Arg  
1 5 10 15

<210> 233

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 233

Ser Ser Arg Leu Leu Ser Leu Leu Val Gly Asp Phe Asn Ser Arg  
1 5 10 15

<210> 234

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 234  
Ser Arg Leu Glu Glu Leu Leu Leu Gly Thr Asn Arg Asp Ser Arg  
1 5 10 15

<210> 235  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 235  
Ser Arg Leu Glu Glu Leu Leu Leu Met Asp Phe Trp Arg Ser Arg  
1 5 10 15

<210> 236  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 236  
Ser Arg Leu Lys Glu Leu Leu Leu Leu Pro Thr Asp Leu Ser Arg  
1 5 10 15

<210> 237  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 237  
Ser Arg Leu Glu Cys Leu Leu Glu Gly Arg Leu Asn Cys Ser Arg  
1 5 10 15

<210> 238  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 238

Ser Ser Lys Leu Tyr Cys Leu Leu Asp Glu Ser Tyr Cys Ser Arg  
 1 5 10 15

<210> 239  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Arbitrary  
 peptide

<400> 239  
 Ser Arg Leu Ser Cys Leu Leu Met Gly Phe Glu Asp Cys Ser Arg  
 1 5 10 15

<210> 240  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Arbitrary  
 peptide

<400> 240  
 Ser Ser Lys Leu Ile Arg Leu Leu Thr Ser Asp Glu Glu Leu Ser Arg  
 1 5 10 15

<210> 241  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Arbitrary  
 peptide

<400> 241  
 Ser Ser Arg Leu Met Glu Leu Leu Gln Glu Gly Gln Gly Trp Ser Arg  
 1 5 10 15

<210> 242  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:Arbitrary  
 peptide

<400> 242  
 Ser Ser Asn His Gln Ser Ser Arg Leu Ile Glu Leu Leu Ser Arg  
 1 5 10 15

<210> 243  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 243  
Ser Ser Arg Leu Trp Gln Leu Leu Ala Ser Thr Asp Thr Ser Arg  
1 5 10 15

<210> 244  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 244  
Ser Ser Lys Leu Trp Gln Leu Leu Ser Ser Pro Ile Asp Ser Arg  
1 5 10 15

<210> 245  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 245  
Ser Arg Leu Val Ala Leu Leu Lys Ser Pro Trp Ser Val Ser Arg  
1 5 10 15

<210> 246  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 246  
Ser Ser Asn Ser Met Leu Trp Lys Leu Leu Ala Ala Pro Ser Arg  
1 5 10 15

<210> 247  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 247  
Ser Ser Lys Thr Leu Trp Arg Leu Leu Glu Gly Glu Arg Ser Arg  
1 5 10 15

<210> 248  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 248  
Ser Arg Ala Gly Pro Val Leu Trp Gly Leu Leu Ser Glu Ser Arg  
1 5 10 15

<210> 249  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 249  
Ser Arg Ser Pro Ile Leu Thr His Leu Leu Ser Leu Gly Ser Arg  
1 5 10 15

<210> 250  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 250  
Ser Ser Thr Gly Ile Leu Trp Lys Leu Leu Thr Ala Glu Ser Arg  
1 5 10 15

<210> 251  
<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 251

Ser Ser His Gly Ile Leu Trp Arg Leu Leu Ser Glu Gly Ser Arg  
1 5 10 15

<210> 252

<211> 11

<212> PRT

<213> Human steroid receptor coactivator 1a

<400> 252

Lys Leu Val Gln Leu Leu Thr Thr Thr Ala Glu  
1 5 10

<210> 253

<211> 11

<212> PRT

<213> Human steroid receptor coactivator 1a

<400> 253

Ile Leu His Arg Leu Leu Gln Glu Gly Ser Pro  
1 5 10

<210> 254

<211> 11

<212> PRT

<213> Human steroid receptor coactivator 1a

<400> 254

Leu Leu Arg Tyr Leu Leu Asp Lys Asp Glu Lys  
1 5 10

<210> 255

<211> 8

<212> PRT

<213> Human steroid receptor coactivator 1a

<400> 255

Leu Leu Gln Gln Leu Leu Thr Glu  
1 5

<210> 256

<211> 11

<212> PRT

<213> Mouse cAMP-responsive element (CREB)-binding protein

<400> 256

Gln Leu Ser Glu Leu Leu Arg Gly Gly Ser Gly  
1 5 10

<210> 257

<211> 11

<212> PRT

<213> Mouse cAMP-responsive element (CREB)-binding protein

<400> 257

Gln Leu Val Leu Leu Leu His Ala His Lys Cys  
1 5 10

<210> 258

<211> 11

<212> PRT

<213> Mouse cAMP-responsive element (CREB)-binding protein

<400> 258

Tyr Leu Glu Gly Leu Leu Met His Gln Ala Ala  
1 5 10

<210> 259

<211> 11

<212> PRT

<213> Mouse cAMP-responsive element (CREB)-binding protein

<400> 259

Leu Leu Ala Ser Leu Leu Gln Ser Glu Ser Ser  
1 5 10

<210> 260

<211> 11

<212> PRT

<213> Mouse cAMP-responsive element (CREB)-binding protein

<400> 260

His Leu Lys Thr Leu Leu Lys Lys Ser Lys Val  
1 5 10

<210> 261

<211> 11

<212> PRT

<213> Human RIP140

<400> 261

Gln Leu Ala Leu Leu Leu Ser Ser Glu Ala His  
1 5 10

<210> 262

<211> 11

<212> PRT

<213> Human RIP140

<400> 262  
Leu Leu Leu His Leu Leu Lys Ser Gln Thr Ile  
1 5 10

<210> 263  
<211> 11  
<212> PRT  
<213> Human RIP140

<400> 263  
Leu Leu Gln Leu Leu Leu Gly His Lys Asn Glu  
1 5 10

<210> 264  
<211> 11  
<212> PRT  
<213> Human RIP140

<400> 264  
Val Leu Gln Leu Leu Leu Gly Asn Pro Lys Gly  
1 5 10

<210> 265  
<211> 11  
<212> PRT  
<213> Human RIP140

<400> 265  
Leu Leu Ser Arg Leu Leu Arg Gln Asn Gln Asp  
1 5 10

<210> 266  
<211> 11  
<212> PRT  
<213> Human RIP140

<400> 266  
Val Leu Lys Gln Leu Leu Leu Ser Glu Asn Cys  
1 5 10

<210> 267  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 267  
Ser Ser Asn His Gln Ser Arg Leu Ile Glu Leu Leu Ser Arg  
1 5 10



<210> 268  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 268  
His Val Tyr Gln His Pro Leu Leu Leu Ser Leu Leu Ser Ser Glu His  
1 5 10 15

Glu Ser Gly

<210> 269  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 269  
His Val Glu Met His Pro Leu Leu Met Gly Leu Leu Met Glu Ser Gln  
1 5 10 15

Trp Gly Ala

<210> 270  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 270  
Gln Glu Ala His Gly Pro Leu Leu Trp Asn Leu Leu Ser Arg Ser Asp  
1 5 10 15

Thr Asp Trp

<210> 271  
<211> 19  
<212> PRT  
<213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 271

Gly	His	Glu	Pro	Leu	Thr	Leu	Leu	Glu	Arg	Leu	Leu	Met	Asp	Asp	Lys
1				5				10					15		

Gln Ala Val

&lt;210&gt; 272

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 272

Leu	Pro	Tyr	Glu	Gly	Ser	Leu	Leu	Leu	Lys	Leu	Leu	Arg	Ala	Pro	Val
1				5				10						15	

Glu Glu Val

&lt;210&gt; 273

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 273

Ser	Gly	Trp	Glu	Asn	Ser	Ile	Leu	Tyr	Ser	Leu	Leu	Ser	Asp	Arg	Val
1				5				10					15		

Ser Leu Asp

&lt;210&gt; 274

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence:Arbitrary  
peptide

&lt;400&gt; 274

Ala	His	Gly	Glu	Ser	Ser	Leu	Leu	Ala	Trp	Leu	Leu	Ser	Gly	Glu	Tyr
1				5				10					15		

Ser Ser Ala

<210> 275  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 275  
Gly Val Phe Cys Asp Ser Ile Leu Cys Gln Leu Leu Ala His Asp Asn  
1 5 10 15

Ala Arg Leu

<210> 276  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 276  
His His Asn Gly His Ser Ile Leu Tyr Gly Leu Leu Ala Gly Ser Asp  
1 5 10 15

Ala Pro Ser

<210> 277  
<211> 19  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 277  
Leu Gly Glu Arg Ala Ser Leu Leu Asp Met Leu Leu Arg Gln Glu Asn  
1 5 10 15

Pro Ala Trp

<210> 278  
<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 278

Ser Gly Trp Asn Glu Ser Thr Leu Tyr Arg Leu Leu Gln Ala Asp Ala  
1 5 10 15

Phe Asp Val

<210> 279

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 279

Pro Ser Gly Gly Ser Ser Val Leu Glu Tyr Leu Leu Thr His Asp Thr  
1 5 10 15

Ser Ile Leu

<210> 280

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 280

Gly Ser Glu Pro Lys Ser Arg Leu Leu Glu Leu Leu Ser Ala Pro Val  
1 5 10 15

Thr Asp Val

<210> 281

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 281  
His Pro Thr His Ser Ser Arg Leu Trp Glu Leu Leu Met Glu Ala Thr  
1 5 10 15

Pro Thr Met

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<210> 282
<211> 19
<212> PRT
<213> Artificial Sequence
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<220>  
<223> Description of Artificial Sequence:Arbitrary peptide

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<400> 282
Val Glu Ser Gly Ser Ser Arg Leu Met Gln Leu Leu Met Ala Asn Asp
  1             5             10             15
```

Leu Leu Thr

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<210> 283
<211> 19
<212> PRT
<213> Artificial Sequence
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<220>  
<223> Description of Artificial Sequence:Arbitrary peptide

<400> 283  
Trp Glu Glu His Ser Gln Met Leu Leu His Leu Leu Asp Thr Gly Glu  
1 5 10 15

Ala Val Trp

```
<210> 284
<211> 19
<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence:Arbitrary
      peptide
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<400> 284  
Pro Val Gly Glu Pro Gly Leu Leu Trp Arg Leu Leu Ser Ala Pro Val  
1 5 10 15

Glu Arg Glu

<210> 285  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 285  
Met Ser Trp Tyr Glu Phe Met Thr Glu Glu Ser Met  
1 5 10

<210> 286  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 286  
Ala Lys His Asp Leu Ser Trp Tyr Glu Phe Leu Gln Leu Pro Ile  
1 5 10 15

<210> 287  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 287  
Ser Arg Leu Ser Trp Trp Glu Phe Leu Gly Ala Ser Asp Cys Gly Thr  
1 5 10 15

Cys

<210> 288  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 288  
Asp Leu Leu Ser Leu Lys Glu Phe Leu Ala Thr  
1 5 10

<210> 289  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 289  
Ser Ser Pro Asn Leu Leu Thr Leu Glu Glu Phe Leu Ser  
\_ 1 5 10

<210> 290  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 290  
Lys Thr Tyr Ser Leu Tyr Glu Phe Leu Glu Leu  
1 5 10

<210> 291  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 291  
Met Ser Asn Arg Tyr Thr Ile Tyr Glu Phe Leu Asn Leu His Ser  
1 5 10 15

<210> 292  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 292  
Leu His Trp Trp Glu Val Leu Ala Glu Lys  
1 5 10

<210> 293

<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 293  
Ser Ser Pro Gln Pro Leu Leu His Trp Trp Glu Met Met Thr Glu Pro  
1 5 10 15

Pro

<210> 294  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 294  
Ser Arg Ala Gly Glu Ser Val His Trp Trp Glu Val Leu  
1 5 10

<210> 295  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 295  
Arg Ala Gly Pro Ser Glu His Trp Trp Glu Tyr Ile Ala Thr Leu  
1 5 10 15

<210> 296  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 296  
Glu Met Ile Ser Trp His Gln Tyr Leu Leu Ser Ile Glu Asn Asn  
1 5 10 15

<210> 297



<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 297  
Ser Ser Leu Arg Trp Asp Glu Phe Leu Met Glu Leu Gly Gly Gly Val  
1 5 10 15

Ala

<210> 298  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 298  
Val Pro Trp Trp Val Trp Leu Ala Glu Gly Asp  
1 5 10

<210> 299  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 299  
Ser Arg Glu Ile Tyr Trp Trp Asp Trp Leu Thr Asp Thr  
1 5 10

<210> 300  
<211> 15  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 300  
Phe Gly Ser Asn Met Leu Asp Leu Pro Thr Phe Leu Asp Trp Leu  
1 5 10 15

<210> 301

<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 301  
Ser Arg Ile Thr Phe Trp Glu Leu Met Leu Glu Gly Gly  
1 5 10

<210> 302  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 302  
Ser Arg Thr Pro Tyr Glu Trp Leu Gly Tyr Trp Gly Ala  
1 5 10

<210> 303  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 303  
Tyr Asp Met Cys Thr Trp Leu Glu Phe Leu Asp Gly Gly Glu Cys  
1 5 10 15

<210> 304  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 304  
Ser Pro Leu Cys Thr Trp Ala Glu Tyr Leu Met Glu Pro Ser Cys  
1 5 10 15

<210> 305  
<211> 15  
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 305

Thr	Gln	Trp	Cys	Thr	Trp	Ala	Glu	Phe	Leu	Ser	Ser	Thr	Asp	Cys
1				5					10					15

<210> 306

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 306

Ser	Ser	Asp	Gly	Cys	Thr	Trp	Gln	Glu	Phe	Leu	Ala	Gly	His	Gly	Pro
1				5					10					15	

Cys

<210> 307

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 307

Pro	Phe	Asn	Asn	Pro	Pro	Trp	Met	Trp	Trp	Ser
1				5					10	

<210> 308

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 308

Ser	Ser	Pro	Thr	Val	His	Glu	Asn	Leu	Pro	Pro	Trp	Leu	Trp	Trp	Ser
1					5				10					15	

Pro

<210> 309

<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 309

Leu Ile His Val Pro Pro Trp Ala Trp Tyr Asp  
1 5 10

<210> 310

<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 310

Gly Phe Asp Val Pro Pro Trp Tyr Trp Asp Phe  
1 5 10

<210> 311

<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 311

Tyr Ser Gln Val Phe Gly Asp Ala Pro Val Trp Ala Trp Tyr Ser Ser  
1 5 10 15

Arg

<210> 312

<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 312

Trp Thr Pro Ser Asp Trp Gln Trp Trp Arg Ser Lys  
1 5 10

<210> 313

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 313

Ser Ser His Trp Ser Ser Asp Ser Ile Phe Pro Gly Phe Trp Tyr Ser  
1 5 10 15

Gly

<210> 314

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 314

Ser Arg Gly Gly Val Asp Leu Asp Ile Gly Asn Ser Ala  
1 5 10

<210> 315

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Arbitrary  
peptide

<400> 315

Glu Gly Glu Asp Val Arg Thr Arg Ile Ala Asn  
1 5 10